Beijing Olympic Stadium -The Water Cube Case Study

Previous System: 1000 Watt Metal Halide Based Light Fixtures

Mledtech System:

260 Watt LED RT410 Flood Light Series



## **Customer Profile**

The Beijing National Aquatics Center, also officially known as the National Aquatics Center, and colloquially known as the Water Cube, is an aquatics center that was built alongside Beijing National Stadium in the Olympic Green for the swimming competitions of the 2008 Summer Olympics

## **Scope of Work**

Mledtech was contacted to create a lighting soultion for the Beijing National Indoor Swimming Facility. This project consisted of a one for one replacement of the existing 1000 Watt Metal Halide Fixtures.

In all sports, LED lighting provides the best stage for competitors to perform, and it's no different for swimmers. Light glare control is one of the most difficult tasks to achieve. Lighting design over water is very challenging because water is a reflective surface that moves. Controlling the glare over the water is not something everyone can do. Most pools have lights pointing straight down at the water which effects the swimmers vision. Mledtech is an expert solving this kind of problem.

## **The Solution**

An engineered photometric design was performed. We checked glare and light output. Then we provided exact aiming points for each fixture. Mledtech Vision Smart 260W RT410 Flood Light Series were easily installed with our one for one plan. Our LED lighting solutions deliver uniform light in the air and on the court much more efficiently than metal halide light and significantly reduce unwanted light spill and light pollution. The lifespan of LEDs generally exceeds 50,000 hours compared to a traditional metal halide lifespan of 18,000 hours.



## **The Results**

Where every stroke counts, uniform, no-glare light does not effect the vision of the athletes while swimming. Mledtech lunimaires produce a minimum of glare and spillover, and require no maintenance.

The new lighting system achieved an average of uniformity of 79 percent and a saved in energy costs by 50 percent. LEDs offer a low-cost entry point to provide high-quality light and make the venue more dynamic. Also, the long life of the LED carries a great saving in replacement parts and an almost total unconcern of the maintenance personnel.

Mledtech Vision Smart RT410 Flood Light fixtures improved the Beijing National Aquatics Center experience with the greatest visual comfort for the swimmer, spectators and coaches alike. The advantage is clear. Mledtech products produce the highest quality lighting in the industry backed by a ten year warranty.



Mledtech approaches each project as a unique opportunity to exceed the customers', the players' and the observers' expectations in terms of improved lighting delivered, improved visual comfort and operational savings. Our process steps help streamline this effort. We will meet directly with financial decision makers to go over final proposal in detail. Mledtech will work with the customer's contractor to provide them with detailed computer aiming points which can be set while on the ground.











